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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/346,353	07/02/1999	MARIE ANGELOPOULOS	YO996-049BX	2281
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EXAMINER				
YOON, TAE H				
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1796				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/346,353

Applicant(s)

ANGELOPOULOS ET AL.

Examiner

Tae H. Yoon

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-7,9-11,14-16,20,22-25,40-42 and 47-56 is/are pending in the application.
- 4a) Of the above claim(s) 47-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9-11,14-16,20,22-25 and 40-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim 53 still recites poly-co-dimethyl amino siloxane as an additive (introduced in amendment filed on July 11, 2007 which is currently pending after non-final rejection of December 13, 2006) and claims 47-56 (previously submitted) are directed to an invention that is non-elected. See the page 2 of the office action mailed on May 4, 2000 in which the **election** of a plasticizer for the additive is stated. Original claims do not recite said poly-co-dimethyl amine siloxane as an additive, and said plasticizers would be limited to species of the original claim 4 which are taught by Han. Thus, unusual or particular plasticizer such as poly-co-dimethyl propylamine siloxane would have been restricted if presented earlier by way of election of species. Also, the solvent of the claim 1 and particular solvents of claim 54 are related as a combination and subcombination which is also subject to the restriction if presented earlier. **Use of siloxane was patented in the parent case as US Pat. 5,969,024.**

Furthermore, said poly-co-dimethyl amine siloxane (poly-co-dimethyl, amine siloxane would be a typo) of claim 53 does not have support in the specification. For the future purpose, claim 53 contains a period (.) in the lines 6 and 18, and claim 54 recites a period (.) in the line 21. Claim 53 recites "comprising" and claim 7 recites "consisting of".

Note that this is a RCE drawn to the examined claims.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, **claims 47-56 are withdrawn** from

consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 3-6, 11, 15, 16, 20 and 22-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This is NEW MATTER rejection since the recited "conjugated **diene** polymer" does not have support in the originally filed specification. Contrary to applicant's statement, **a diene polymer (elastomer or rubber) is not disclosed**.

Above new matter rejection is maintained with following response.

Applicant asserts that organic chemists classify "dienes" *per se* as hydrocarbons which contain two double bonds which would encompass several categories and that the "conjugated dienes" would be supported by the specification wherein "--- the polymers are conjugated systems ---" is taught. However, applicant failed to provide any document supporting said assertion/definition and the instant conjugated polymers such as polyaniline does not contain hydrocarbons containing two double bonds, but rather the double bonds bonding a carbon atom and nitrogen atom (applicant's asserted heterodiene). Furthermore, the recited polyphenylene sulfide contains O=S=O group

which does not fall in any of the asserted definition of various dienes. The art well known synonym for the diene is "diolefin" (see any polymer textbook or chemical dictionary) and various disclosed and claimed polymers do not have the diolefin groups contrary to applicant's assertion. Cancellation of "diene" is suggested.

Amended claim 11 is also subject to NEW MATTER rejection since the component described for the figure 4 does not have the recited 5% additive.

Claim 11 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the particular additive used for figure 4 (if any additive was used, and the examiner does not see any additive though as pointed out above), does not reasonably provide enablement for the recited additive, per se. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. The particular GPC profile would be dependent a particular component (plasticizer)used, and thus the scope of the recited general additive, if used at all for the figure 4, is broader than that of said GPC profile.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5, 7, 9, 10, 11, 14, 25 and 40-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited "conjugated polymer (polymer(s))" in lines 5 and 11 of claims 7 and 11 lacks antecedent basis in claim 1 wherein "conjugated diene polymer" is recited and thus it is confusing and indefinite. Applicant failed to address this.

The recited "blends thereof with other polymers and copolymers of the monomers thereof" in claims 5 and 9 is indefinite since the polymers for the recited Markush language must be definite and limited to the recited species, but said other polymers and copolymers encompass polymers not recited in said Markush format. Also, said "the monomers" lacks antecedent basis and improperly broadens polymers in said Markush format.

The recited limitation in claim 11 referring to the specification/figure is indefinite since claimed limitation must be self-limiting and cannot dependent on the specification/figure. The recited "additive" is indefinite since a particular GPC curve would be dependent on the particular component used, in this case a particular plasticizer. Thus, an essential component is omitted. Also, the abbreviated NMP is indefinite and a full chemical name is needed (at least in the first occurrence).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-7, 9, 10, 14-16, 20, 22-25 and 40-42 are rejected under 35

U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Han (US 5,171,478).

Rejection is maintained for reason of record and following. Contrary to applicant's assertion, the instant claims do not require NMP as the only solvent. Applicant's argument is based on the claim 11 which is not rejected here.

Again, a mixture of NMP and tripropylamine used in example 6 which yielded polyaniline solution would meet the instant solvent absent further limitation.

Claims 1, 3-7, 9, 10, 14-16, 20, 22-25 and 40-42 are rejected under 35

U.S.C. 103(a) as obvious over Han (US 5,171,478) in view of Cao et al (US 5,232,631).

Rejection is maintained for reason of record and above and following response. The recited method with "consisting of" in claim 7 does not exclude tripropylamine which would be a part of the solvent.

Cao et al is recited to show that stretching of a film is well known practice in the art. Again, stretching of film of Han in order to obtain an oriented film is an obvious practice as taught by Cao et al.

Claims 7, 9, 14, 25 and 40-42 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Eisenbaumer (US 4,983,322).

Rejection is maintained for reason of record with following response.

Applicant asserts that he has provided experimental data under oath, but the examiner does not see any declaration on the record. If applicant is referring to the figure, the deficiency for said figure was pointed out by the examiner already (data in figures do not commensurate in scope of the claim for the component and method used thereof).

Contrary to applicant's assertion, again, the instant claims do not recite any particular dopant. Eisenbaumer teaches use of the same composition and method, and thus the instant properties would be inherent. With respect to various dopants, see *In re Mills*, 477 F2d 649, 176 USPQ 196 (CCPA 1972); Reference must be considered for all that is disclosed and must not be limited to preferred embodiments or working examples.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tae H Yoon/
Primary Examiner
Art Unit 1796

THY/August 24, 2009